

## CLAIMS:

1. (Currently amended) A method of assisting a user who is editing a markup language document on a computer, comprising:  
presenting to said user said markup language document on a display of said computer for editing, wherein the markup language document is a document comprising current content generated using at least one markup language; and  
providing grammatical assistance to said user based on a markup language grammar inferred from current content of said markup language document, wherein the markup language grammar comprises syntax rules of the at least one markup language used to generate the current content of the markup language document.
2. (Currently amended) The method of claim 1 ~~further comprising inferring said grammar from the current content of said document, wherein the markup language grammar comprises at least one of definition rules for creating new types of markup language document elements and attributes, and declaration rules for enabling elements and attributes with specific names and types to appear in the markup language document.~~
3. (Currently amended) The method of claim ~~[[2]]~~ 1, wherein said markup language grammar is inferred automatically from the current content and loaded into a memory of the computer.
4. (Canceled)
5. (Currently amended) The method of claim ~~[[4]]~~ 3, wherein said markup language grammar is dynamically updated based on real-time edits to said markup language document.
6. (Currently amended) The method of claim 5, wherein said markup language grammar is only updated after a pre-defined time interval has elapsed since said markup language document was last edited.

7. (Currently amended) The method of claim 2, wherein said inferred markup language grammar is associated with a markup language grammar element appearing in said markup language document for which an associated real markup language grammar defined in a markup language grammar file is not available.

8. (Currently amended) The method of claim ~~[[7]]~~ 1, ~~further comprising wherein providing assistance to said user comprises, where possible, providing assistance to said user for editing said markup language document based on a real markup language grammar defined in a markup language grammar file for portions of the markup language document having elements corresponding to information in the markup language grammar file, and providing assistance to said user for editing said markup language document based on the inferred markup language grammar for portions of the markup language document having elements that do not correspond to information in the markup language grammar file.~~

9. (Currently amended) The method of claim ~~[[8]]~~ 1, wherein said markup language document is an extensible markup language (XML) document.

10. (Currently amended) The method of claim ~~[[9]]~~ 7, wherein said real markup language grammar file is an XML schema definition (XSD) file or a data type definition (DTD) file.

11. (Currently amended) The method of claim 10, wherein when said XML document is associated with a plurality of markup language grammars, each one of said plurality of markup language grammars is associated with a namespace and, for a particular markup language grammar element associated with a particular namespace, assistance related to said particular markup language grammar element is provided to said user based on the markup language grammar associated with said particular namespace.

12. (Currently amended) The method of claim 7, wherein ~~said inferring~~ providing grammatical assistance to said user based on a markup language grammar inferred from current content of said markup language document comprises:

constructing a document object model associated with said current content of said markup language document, said document object model comprising a set of markup language grammar elements each associated with one or more portions of said current content of said markup language document;

for each markup language grammar element of said set, determining whether said each markup language grammar element is associated with an available real markup language grammar and, if not, inferring one or more markup language grammar rules associated with said each markup language grammar element; and

incorporating said inferred one or more markup language grammar rules into said inferred markup language grammar.

13. (Currently amended) A method of providing assistance to a user who is editing an extensible markup language (XML) document, comprising:

presenting to said user said XML document for editing;

monitoring a user input for an edit event;

after in response to detecting an edit event, inferring a markup language grammar from current content of said XML document;

providing assistance to said user based on said inferred markup language grammar, wherein the markup language grammar comprises XML syntax rules inferred from the current content of said XML document.

14. (Currently amended) A computer readable medium storing thereon computer executable instruction code, said code when executed by a processor of a computer causes said computer to:

present a markup language document on a display of said computer to a user for editing, wherein the markup language document is a document comprising current content generated using at least one markup language; and

provide grammatical assistance to said user based on a markup language grammar inferred from current content of said markup language document, wherein the markup language grammar comprises syntax rules of the at least one markup language used to generate the current content of the markup language document.

15. (Currently amended) The computer readable medium of claim 14, wherein said markup language grammar is inferred automatically from the current content and loaded into a memory of the computer.

16. (Currently amended) The computer readable medium of claim ~~[[15]]~~ 14, wherein providing assistance to said user comprises, where possible, providing assistance to said user for editing said markup language document based on a real markup language grammar defined in a markup language grammar file for portions of the markup language document having elements corresponding to information in the markup language grammar file, and providing assistance to said user for editing said markup language document based on the inferred markup language grammar for portions of the markup language document having elements that do not correspond to information in the markup language grammar file.

17. (Canceled)

18. (Currently amended) The computer readable medium of claim ~~[[17]]~~ 14, wherein when said ~~[[XML]]~~ markup language document is associated with a plurality of markup language grammars, each one of said plurality of markup language grammars is associated with a namespace and, for a particular markup language grammar element associated with a particular namespace, assistance related to said particular markup language grammar element is provided to said user based on the markup language grammar associated with said particular namespace.

19. (Currently amended) A computer ~~which is adapted to carry out the method of claim 1,~~ comprising:

a processor; and  
a memory coupled to the processor, wherein the memory comprises instructions,  
which when executed by the processor, cause the processor to:  
present to said user said markup language document on a display of said computer  
for editing, wherein the markup language document is a document comprising current  
content generated using at least one markup language; and  
provide grammatical assistance to said user based on a markup language grammar  
inferred from current content of said markup language document, wherein the markup  
language grammar comprises syntax rules of the at least one markup language used to  
generate the current content of the markup language document.

20. (Original) A computer which is adapted to access the computer readable medium of claim 14 and to execute the computer executable code stored thereon.

21. (New) The computer readable medium of claim 14, wherein said markup language grammar is dynamically updated based on real-time edits to said markup language document.

22. (New) The computer readable medium of claim 21, wherein said markup language grammar is only updated after a pre-defined time interval has elapsed since said markup language document was last edited.